

$CE$  in  $i$ , producere licet  $iE$  ad  $V$ , ut sit  $EV$  ad  $iE$  ut  $FH$  ad  $HI$ , & agere  $Vf$  parallelam ipsi  $BD$ . Eodem recidit si centro  $i$ , intervallo  $IH$  describatur circulus secans  $BD$  in  $X$ , producat  $iX$  ad  $Y$ , ut sit  $iY$  æqualis  $IF$ , & agatur  $Yf$  ipsi  $BD$  parallela.

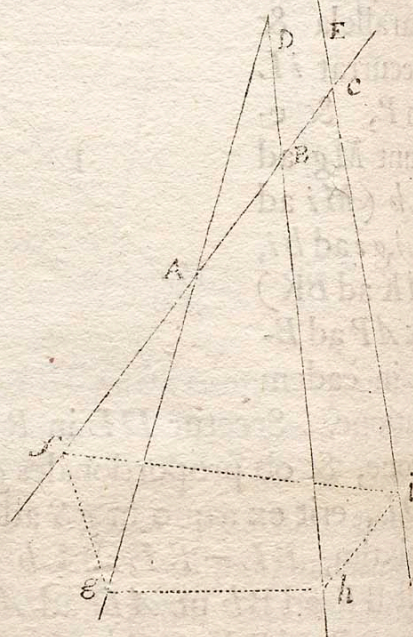
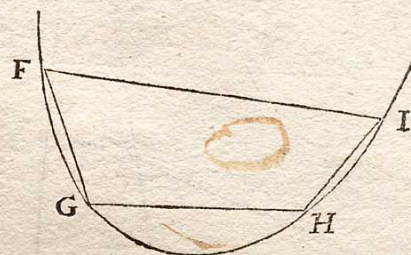
Prop. XXIX. Prob. XIX.

*Trajectoriam specie datam describere, quæ a rectis quatuor positione datis in partes secabitur, ordine, specie & proportione datas.*

Describenda sit Trajectoria  $fgbi$ , quæ similis sit lineæ curvæ  $FGHI$ , & cujus partes  $fg$ ,  $gb$ ,  $bi$  illius partibus  $FG$ ,  $GH$ ,  $HI$  similes &

proportionales, rectis  $AB$  &  $AD$  &  $BD$ ,  $B$  &  $EC$

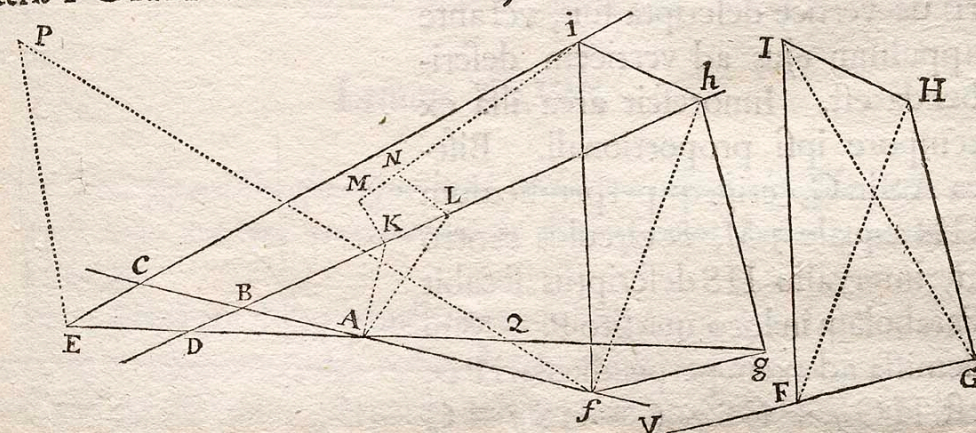
positione datis, prima primis, secunda secundis, tertia tertiis interjaceant. Actis rectis  $FG$ ,  $GH$ ,  $HI$ ,  $FI$ , describatur Trapezium  $fgbi$  quod sit Trapezio  $FGHI$  simile & cujus anguli  $f$ ,  $g$ ,  $b$ ,  $i$  tangant rectas illas positione datas  $AB$ ,  $AD$ ,  $BD$ ,  $CE$  singuli singulas dicto ordine. Dein (per Lem. XXVII) circa hoc Trapezium describatur Trajectoria curvæ lineæ  $FGHI$  consimilis.



Scho-

Scholium.

Construi etiam potest hoc Problema ut sequitur. Junctis  $FG$ ,  $GH$ ,  $HI$ ,  $FI$  produc  $GF$  ad  $V$ , jungeq;  $FH$ ,  $IG$ , & angulis  $FGH$ ,  $VFH$  fac angulos  $CAK$ ,  $DAL$  æquales. Concurrent  $AK$ ,  $AL$  cum recta  $BD$  in  $K$  &  $L$ , & inde agantur  $KM$ ,  $LN$ , quarum  $KM$  constituat angulum  $AKM$  æqualem angulo  $GHI$ , sitq; ad  $AK$  ut est  $HI$  ad  $GH$ ; &  $LN$  constituat angulum  $ALN$  æqualem angulo  $FHI$ , sitq; ad  $AL$  ut  $HI$  ad  $FH$ . Ducantur autem  $AK$ ,  $KM$ ,  $AL$ ,  $LN$  ad eas partes linearum  $AD$ ,  $AK$ ,  $AL$ , ut literæ  $CAKMC$ ,  $ALK$ ,  $DALND$  eodem ordine cum literis  $FGHIF$  in orbem redeant, & acta  $MN$  occurrat rectæ



$CE$  in  $i$ . Fac angulum  $iEP$  æqualem angulo  $IGF$ , sitq;  $PE$  ad  $Ei$  ut  $FG$  ad  $GI$ ; & per  $P$  agatur  $QPf$ , quæ cum recta  $AED$  contineat angulum  $PQE$  æqualem angulo  $FIG$ , rectaq;  $AB$  occurrat in  $f$ , & jungatur  $fi$ . Agantur autem  $PE$  &  $PQ$  ad eas partes linearum  $CE$ ,  $PE$ , ut literarum  $PEiP$  &  $PEQP$  idem sit ordo circularis qui literarum  $FGHIF$ , & si super linea  $fi$  eodem quoq; literarum ordine constituatur Trapezium  $fgbi$  Trapezio  $FGHI$  simile, & circumscribatur Trajectoria specie data, solvetur Problema.

Hactenus de orbibus inveniendis. Superest ut motus corporum in orbibus inventis determinemus.

SEC-